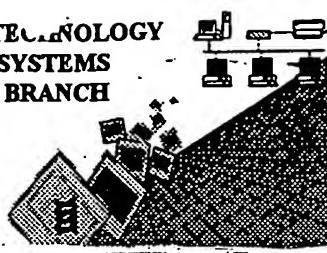# RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _6 082,747_

Source: _OIPE_

Date Processed by STIC: _6 17 02_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: **patin21help@uspto.gov** or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: **patin3help@uspto.gov** or phone 703-306-4119 (R. Wax)

TO **REDUCE** ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
> **http://www.uspto.gov/web/offices/pac/checker**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (**<http://www.uspto.gov/ebc/efs/downloads/documents.htm>** , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. **Hand Carry directly to:**
    U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
             Or
    U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service, or other delivery service to:** U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

ERROR DETECTED   **SUGGESTED CORRECTION**   SERIAL NUMBER: _10/082,747_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1_____Wrapped Nucleics   The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
      Wrapped Aminos   was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will
                          prevent "wrapping."

2_____Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.

3_____Misaligned Amino   The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers;
      Numbering   use space characters, instead.

4_____Non-ASCII   The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please
                          ensure your subsequent submission is saved in ASCII text.

5_____Variable Length   Sequence(s)_____contain n's or Xaa's representing more than one residue. Per Sequence Rules,
                          each n or Xaa can only represent a single residue. Please present the maximum number of each
                          residue having variable length and indicate in the <220>-<223> section that some may be missing.

6_____PatentIn 2.0   A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
      "bug"   sequences(s) _____. Normally, PatentIn would automatically generate this section from the
                          previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
                          the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for
                          Artificial or Unknown sequences.

7_____Skipped Sequences   Sequence(s)_____ missing. If intentional, please insert the following lines for each skipped sequence:
      (OLD RULES)   (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
                          (i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
                          (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
                          This sequence is intentionally skipped

                          Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8_____Skipped Sequences   Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
      (NEW RULES)   <210> sequence id number
                          <400> sequence id number
                          000

9_____Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
      (NEW RULES)   Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
                          In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.

10 ✓ Invalid <213>   Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or
      Response   scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or
                          is Artificial-Sequence

11_____Use of <220>   Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
                          Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or
                          "Unknown." Please explain source of genetic material in <220> to <223> section.
                          (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12_____PatentIn 2.0   Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
      "bug"   resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
                          listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13_____Misuse of n   n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent
                          any value not specifically a nucleotide.

AMC/MH – Biotechnology Systems Branch – 08/21/2001

OIPE

Does Not Comply
Corrected Diskette Needed

```
          RAW SEQUENCE LISTING              DATE: 06/17/2002
          PATENT APPLICATION:  US/10/082,747   TIME: 12:50:57

            Input Set : A:\476112USseqlist.txt
            Output Set: N:\CRF3\06172002\J082747.raw

  4 <110> APPLICANT: Genentech, Inc.
  5         Ballinger, Marcus D.
  6         Jones, Jennifer T.
  7         Fairbrother, Wayne J.
  8         Sliwkowski, Mark X.
  9         Wells, James A.
 12 <120> TITLE OF INVENTION: HEREGULIN VARIANTS
 15 <130> FILE REFERENCE: 402E-476112US
 17 <140> CURRENT APPLICATION NUMBER: US 10/082,747
 18 <141> CURRENT FILING DATE: 2002-06-10
 20 <150> PRIOR APPLICATION NUMBER: US 09/101,544
 21 <151> PRIOR FILING DATE: 1998-07-17
 23 <150> PRIOR APPLICATION NUMBER: PCT/US/98/01579
 24 <151> PRIOR FILING DATE: 1998-02-10
 26 <150> PRIOR APPLICATION NUMBER: US 08/799,054
 27 <151> PRIOR FILING DATE: 1997-02-10
 29 <160> NUMBER OF SEQ ID NOS: 116
 31 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 33 <210> SEQ ID NO: 1
 34 <211> LENGTH: 71
 35 <212> TYPE: PRT
 36 <213> ORGANISM: Homo sapiens
 38 <220> FEATURE:
 40 <400> SEQUENCE: 1
 41  Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
 42  1               5                   10                  15
 43  Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
 44              20                  25                  30
 45  Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
 46          35                  40                  45
 47  Val Met Ala Ser Phe Tyr Lys His Leu Gly Ile Glu Phe Met Glu Ala
 48      50                  55                  60
 49  Glu Glu Leu Tyr Gln Lys Arg
 50  65                  70
 52 <210> SEQ ID NO: 2
 53 <211> LENGTH: 66
 54 <212> TYPE: PRT
 55 <213> ORGANISM: Homo sapiens
 57 <400> SEQUENCE: 2
 58  Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
 59  1               5                   10                  15
 60  Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
 61              20                  25                  30
```

C--> 18 <141> CURRENT FILING DATE: 2002-06-10

```
62  Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
63          35                  40                  45
64  Val Pro Met Lys Val Gln Asn Gln Glu Lys Ala Glu Glu Leu Tyr Gln
65      50                  55                  60
66  Lys Arg
67  65

69  <210> SEQ ID NO: 3
70  <211> LENGTH: 63
71  <212> TYPE: PRT
72  <213> ORGANISM: Homo sapiens

74  <400> SEQUENCE: 3
75  Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
76   1               5                  10                  15
77  Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
78              20                  25                  30
79  Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
80          35                  40                  45
81  Val Met Ala Ser Phe Tyr Lys Ala Glu Glu Leu Tyr Gln Lys Arg
82      50                  55                  60

84  <210> SEQ ID NO: 4
85  <211> LENGTH: 65
86  <212> TYPE: PRT
87  <213> ORGANISM: Homo sapiens

89  <400> SEQUENCE: 4
90  Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
91   1               5                  10                  15
92  Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
93              20                  25                  30
94  Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
95          35                  40                  45
96  Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
97      50                  55                  60
98  Glu
99  65

101 <210> SEQ ID NO: 5
102 <211> LENGTH: 66
103 <212> TYPE: PRT
104 <213> ORGANISM: Rattus rattus

106 <400> SEQUENCE: 5
107 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
108  1               5                  10                  15
109 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
110             20                  25                  30
111 Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
112         35                  40                  45
113 Val Pro Met Lys Val Gln Thr Gln Glu Lys Ala Glu Glu Leu Tyr Gln
114     50                  55                  60
115 Lys Arg
116 65
```

RAW SEQUENCE LISTING   DATE: 06/17/2002
PATENT APPLICATION: US/10/082,747   TIME: 12:50:57

Input Set : A:\476112USseqlist.txt
Output Set: N:\CRF3\06172002\J082747.raw

```
118 <210> SEQ ID NO: 6
119 <211> LENGTH: 71
120 <212> TYPE: PRT
121 <213> ORGANISM: Rattus rattus
123 <400> SEQUENCE: 6
124   Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
125   1               5                   10                  15
126   Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
127               20                  25                  30
128   Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
129           35                  40                  45
130   Val Met Ala Ser Phe Tyr Lys His Leu Gly Ile Glu Phe Met Glu Ala
131       50                  55                  60
132   Glu Glu Leu Tyr Gln Lys Arg
133   65                  70
135 <210> SEQ ID NO: 7
136 <211> LENGTH: 63
137 <212> TYPE: PRT
138 <213> ORGANISM: Rattus rattus
140 <400> SEQUENCE: 7
141   Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
142   1               5                   10                  15
143   Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
144               20                  25                  30
145   Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
146           35                  40                  45
147   Val Met Ala Ser Phe Tyr Lys Ala Glu Glu Leu Tyr Gln Lys Arg
148       50                  55                  60
150 <210> SEQ ID NO: 8
151 <211> LENGTH: 64
152 <212> TYPE: PRT
153 <213> ORGANISM: Rattus rattus
155 <400> SEQUENCE: 8
156   Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
157   1               5                   10                  15
158   Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
159               20                  25                  30
160   Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
161           35                  40                  45
162   Val Pro Met Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro Glu
163       50                  55                  60
165 <210> SEQ ID NO: 9
166 <211> LENGTH: 81
167 <212> TYPE: PRT
168 <213> ORGANISM: Rattus rattus
170 <400> SEQUENCE: 9
171   Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
172   1               5                   10                  15
173   Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
```

```
174              20              25              30
175    Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
176              35              40              45
177    Val Pro Met Phe Tyr Ser Met Thr Ser Arg Arg Lys Arg Gln Glu Thr
178         50                    55              60
179    Glu Lys Pro Leu Glu Arg Lys Leu Phe His Ser Leu Val Lys Glu Ser
180    65                    70              75              80
181    Lys
184 <210> SEQ ID NO: 10
185 <211> LENGTH: 65
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 10
190    Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
191     1               5               10              15
192    Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
193              20              25              30
194    Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
195              35              40              45
196    Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
197         50                    55              60
198    Glu
199    65
201 <210> SEQ ID NO: 11
202 <211> LENGTH: 65
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapiens
206 <400> SEQUENCE: 11
207    Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
208     1               5               10              15
209    Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
210              20              25              30
211    Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
212              35              40              45
213    Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
214         50                    55              60
215    Glu
216    65
218 <210> SEQ ID NO: 12
219 <211> LENGTH: 65
220 <212> TYPE: PRT
221 <213> ORGANISM: Homo sapiens
223 <400> SEQUENCE: 12
224    Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
225     1               5               10              15
226    Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
227              20              25              30
228    Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
229              35              40              45
```

```
230  Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
231      50              55              60
232  Glu
233  65
235  <210> SEQ ID NO: 13
236  <211> LENGTH: 71
237  <212> TYPE: PRT
238  <213> ORGANISM: Gallus domesticus
240  <400> SEQUENCE: 13
241  Ser His Leu Thr Lys Cys Asp Ile Lys Gln Lys Ala Phe Cys Val Asn
242   1           5               10              15
243  Gly Gly Glu Cys Tyr Met Val Lys Asp Leu Pro Asn Pro Pro Arg Tyr
244          20              25              30
245  Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
246          35              40              45
247  Val Met Ala Ser Phe Tyr Lys His Leu Gly Ile Glu Phe Met Glu Ala
248      50              55              60
249  Glu Glu Leu Tyr Gln Lys Arg
250  65              70
252  <210> SEQ ID NO: 14
253  <211> LENGTH: 49
254  <212> TYPE: PRT
255  <213> ORGANISM: Not relevant (recombinant)
257  <400> SEQUENCE: 14
258  Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
259   1           5               10              15
260  Gly Gly Glu Cys Phe Met Val Lys Asp Pro Ser Arg Tyr Leu Cys Lys
261          20              25              30
262  Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr Val Met Ala
263          35              40              45
264  Ser
267  <210> SEQ ID NO: 15
268  <211> LENGTH: 48
269  <212> TYPE: PRT
270  <213> ORGANISM: Homo sapiens
272  <400> SEQUENCE: 15
273  Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His
274   1           5               10              15
275  Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn
276          20              25              30
277  Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Arg
278          35              40              45
280  <210> SEQ ID NO: 16
281  <211> LENGTH: 49
282  <212> TYPE: PRT
283  <213> ORGANISM: Not relevant (recombinant)
285  <400> SEQUENCE: 16
286  Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
287   1           5               10              15
```

— Invalid response, see item 18 on error summary sheet

Same error

VERIFICATION SUMMARY   DATE: 06/17/2002
PATENT APPLICATION: US/10/082,747   TIME: 12:50:58

Input Set : A:\476112USseqlist.txt
Output Set: N:\CRF3\06172002\J082747.raw

L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date